

REMARKS

Claims 1-23 are currently pending in the application. By this amendment, claims 1 and 12 are amended for the Examiner's consideration. Claim 23 is added for the Examiner's consideration. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

Allowed Claims

Applicants appreciate the indication that claims 12, 13 and 17 contain allowable subject matter. Claim 12 is amended into independent format, including the subject matter of base claim 1 and any intervening claims, in order to place this claim and claims dependent thereon in condition for allowance. However, Applicants submit that all of the claims are in condition for allowance for the following reasons.

Rejection under 35 U.S.C. §112, 2nd paragraph

Claims 18-22 are rejected under 35 U.S.C. §112, 2nd paragraph. This rejection is respectfully traversed.

Applicants submit that there is no requirement to place steps of a method claim in specific ordering within the claim. Accordingly, Applicants have not amended claim 18; however, Applicants do note that there may be a specific order of claim elements, despite their ordering within the claim.

But, in the present claim, the following steps may be in either order:

1. positioning the diverting mechanism at one of the first home position and the second home position; and
2. determining a diverting direction of the item based on classification information associated with the item.

Applicants agree with the Examiner that the positioning of the mechanism into one of the home positions may occur prior to the determining step. However, the invention can equally determine a direction of travel and then position the diverting mechanism in the home position. This is possible since a sensor downstream from the diverting mechanism will allow sufficient time for the diverting mechanism to be properly positioned in either of the home positions, prior to an item passing.

Applicants request withdrawal of the 112, 2nd paragraph, rejection.

35 U.S.C. §103 Rejection

Claims 1-11, 14-16 and 18-22 were rejected under 35 U.S.C. §103(a) over U. S. Patent No. 5,620,102 to Finch, et al. This rejection is respectfully traversed.

Rejection over Claims 1-11

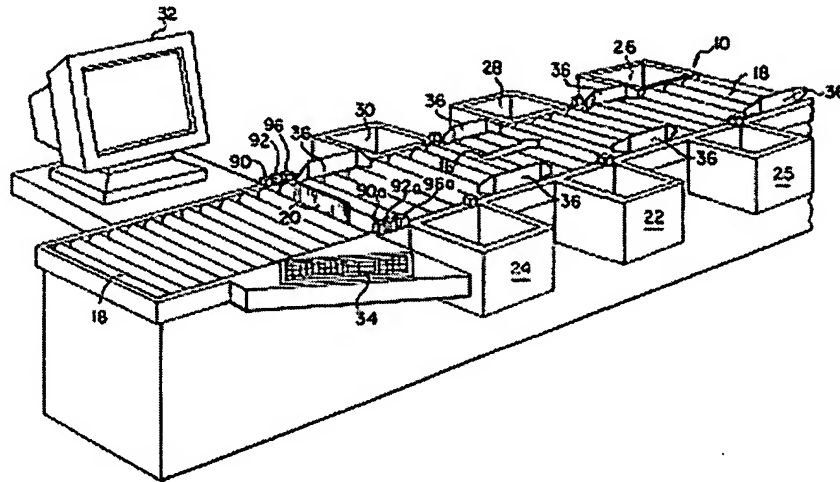
Claim 1, recites, in part,

a moveable diverting mechanism extending from the frame member, the moveable diverting mechanism being movable substantially perpendicular to the original direction of travel of the item being transported on the existing conveyor system and diverting the item in either a first direction or a second opposing and aligned direction

However, this feature is not taught or suggested in the Finch reference. For example, assuming *arguendo*, that the Examiner's statement on page 5 of the office action is correct, it is submitted that such a configuration would not teach a divert mechanism which has exits in alignment with one another.

By way of illustration, assuming that the Finch mechanism includes a single diverting mechanism 36 to be referenced as smaller parts within a larger, whole unit (defined by all diverter's (36) grouped together), such a diverting mechanism includes exits which are offset from one another; not in alignment. As shown in Figure 1, reproduced below, it is clearly shown

that the exits, e.g., container, 22, 24, 25, 26, 28 or 30, are not in alignment with one another. These exit bins are offset from one another.



It is also apparent from this figure that any one single plate or combination of plates cannot divert the parcels in either a first direction or a second opposing, aligned direction. In fact, any of the individual plates can only divert the parcels in one direction, and the whole can only divert the parcels into containers which are offset from one another, not in alignment.

Additionally, Applicants remain of the opinion that the Examiner's interpretation of Finch is overly broad. Although Finch is directed to a divert mechanism, the divert mechanism includes several distinct and separate mechanisms, each capable of moving parcels in only a single direction via the use of the parcel guiding apparatus, e.g., plate, configured to be movable across the width of the conveyor. As disclosed at col. 3, lines 20-25:

The apparatus 10 is provided with a plurality of parcel guiding apparatus (plates) 36, each positioned to direct a parcel into one container, 22, 24, 25, 26, 28 or 30. The parcel guiding apparatus 36 are mounted on rails (See FIG. 2) so that they can move in a direction parallel to the length of the rollers 14 and across the width of the conveyor 12.

Only one container is associated with each of the parcel guiding apparatus. However, in the present invention, the diverting mechanism can divert packages in two directions. This is a significant advantage over Finch. As previously argued, in essence, the present invention has doubled the capacity of Finch.

Also, Applicants agree that Finch does disclose a means 20 for preventing jams. However, Finch still does not include many of the sensors of the invention, nor would such sensors be required or even remotely contemplated by Finch. For example, Finch would not require:

1. at least one home sensor for detecting a home position of the moveable diverting mechanism,
2. at least one over travel sensor for detecting an over travel position of the moveable diverting mechanism,
3. momentary contacts which provide an input signal to control the movement of the moveable diverting mechanism, or
4. an over current sensor.

In Finch, since each plate only diverts the parcels in one direction, there is no need for a home sensor. This is because each plate must return to its original position after diverting a parcel. If the plate did not return to its original position, then the system would not work in its intended manner, e.g., each plate to move parcels in a single direction. For this reason, a home sensor would simply be unnecessary in the Finch system. Also, there would be no reason to include an over travel sensor. Instead, as shown in Figure 2, Finch uses mechanical "stops" on the bars. Additionally, Finch does not require momentary contacts and an over current sensor since this system relies on hydraulics.

Claims 14-17

Applicants further submit that Finch does not teach or suggest the features of claim 14, for example. In claim 14, the invention requires

a downward extending moveable blade member coupled to the gliding mechanism, the downward extending blade member having opposing blade surfaces and a longitudinal axis, the opposing blade surfaces facing opposing exits and the longitudinal axis extending in a direction between the entrance and another of the exits.

Again, even assuming that the Examiner's argument is correct at page 5 of the office action, Applicants submit that the Finch system does not show opposing blade surfaces facing opposing exits. Instead, the surfaces that are moving the parcels are facing one another. This is completely opposite to opposing surfaces.

Claim 14 also requires a gliding mechanism extending across a frame member of the frame and adapted to move between opposing exits of the plurality of exits. But, in Finch, the gliding mechanism would only move to one exit and not between opposing exits of the plurality of exits. Any other interpretation would be much too broad.

Additionally, and as discussed above, Finch does not teach or suggest the sensors as recite in claim 16.

Claims 18-22

Applicants further submit that the steps of the claimed invention are also distinguishable over Finch. By way of example, Finch does not show:

locating a first home position and a second home position
of a diverting mechanism;
positioning the diverting mechanism at one of the first
home position and the second home position ...

These steps would simply not be necessary in the Finch system. In Finch, each of the individual plates only work to move the parcels in a single direction. For this reason, the plates would always return to their original position in order to again divert the parcel towards the single direction. In other words, there is only one home position. If the plates did not return to their original position, then the plates would not be able to move the parcels into the container associated with that particular plate. Thus, there is no need or requirement to locate a first or a second home position; there is only a single home position which would allow each plate to move the parcels into the opposing containers.

Keeping with this logic, there is also no reason to position the plate at one of the first home position and the second home position. As discussed above, if the plate was in any other position but the only single home position, the plate would not be able to direct the parcels into the respective container. In fact, if the plate were in any other position but at the opposite side of the respective container, this system would not function in its intended manner. In other words, it would not work, at all.

Also, in Finch, as discussed above, the plate would not move items in a first and a second position (claim 19). Nor, is there any disclosure concerning, for example, (i) exceeding a threshold physical characteristic limit of an item and (ii) the diverting mechanism exceeding a travel limit.

Accordingly, Applicants respectfully request that the rejection over claims 1-11, 14-16 and 18-22 be withdrawn.

Added Claim

Applicants add claim 23 for the Examiner's further consideration. Support for the added claim is provided in at least Figure 1 and the description of this figure. Applicants submit that the Finch reference does not show the features of this added claim. Finch shows several blades or plates that are used to move the parcels into opposing directions. This is contrary to the recited features of the added claim.

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CONCLUSION

Applicants appreciate the indication of allowable subject matter. However, in view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 23-1951.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', with a long horizontal flourish extending to the right.

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